Wyoming Game & Fish Department

Conserving Wildlife—Serving People

2008 Edition

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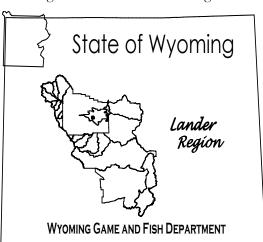


It's Time for Another Year of Fishing!!

Glad to see you are back to read another edition of our annual newsletter. Or perhaps this is you first time. If, so we welcome you and hope you find it useful and informative. The Lander Region is one of eight Wyoming Game and Fish Department management areas. It encompasses the Wind River Drainage (exclusive of the Wind River Reservation), the Upper Sweetwater River Drainage, and parts of the Great Divide Basin. If you have questions regarding fishing or Game and Fish management issues in this area, we are the ones to talk to. You can get a hold of one of us by using the contact information found on the back page.

We hope you found the time to take advantage of some of the great fishing opportunities available in the region and had an enjoyable year of fishing in 2007. We will strive to make 2008 an even better year for you and other anglers. We will be monitoring fish

populations, researching native fish, assessing and improving habitat, stocking fish, studying better and more efficient ways to utilize stocked fish, fine-tuning regulations to meet your needs and provide better fishing, looking for new access opportunities, and a host of other activities. All of these things we do to fulfill our mission of conserving and enhancing all aquatic wildlife and their habitats in Wyoming, while providing for quality fisheries resources and angling opportunities.



Changes in Fishing Regulations for 2008-2009

Every two years, fishing regulations are reviewed, proposed changes presented to the public for comment, and new regulations approved by the Wyoming Game and Fish Commission. As a result of this process, new regulations were enacted on January 1, 2008 and will be in force until the end of 2009 unless otherwise modified or rescinded by the Commission. The major changes that affect the Lander Region are highlighted below, but we strongly urge you to review a copy of the regulation booklet available at all license-selling agents before you head to your favorite lake or stream.

- The brook trout limit was separated from the general trout limit. Unless individual water or drainage-wide exceptions are listed in the regulation the new limit consists of six trout, no more than one shall exceed 20 inches, and 16 brook trout, no more than six shall exceed 8 inches.
- For all **streams** within the Wind/Big Horn River Drainage, unless indicated otherwise, the creel limit on trout is six per day and no more than two can be cutthroat trout. Only one trout over 16 inches is allowed per day.
- The whitefish limit was reduced from 50 to 25 fish per day.
- Walleye and sauger limits were separated, allowing the taking of six walleye and two sauger per day. See the separate article on Page 5 for more on this regulation.
- Legal methods for taking baitfish by seining license holders were liberalized—check the regulation booklet for more details.
- Seining license holders are no longer allowed to give live haitfish to other anglers except to other anglers in his or her fishing party for use when the seining license holder is present.
- Live baitfish purchased from a baitfish dealer may be kept for 15 consecutive days. This was increased from 10 days for the convenience of anglers.
- Fish Lake. The creel limit on trout shall be three per day or in possession. No more than one trout shall exceed 16 inches (previously 20 inches).
- Middle Depression Reservoir. The creel limit on trout shall be three per day or in possession. No more than one trout shall exceed 16 inches (previously 15 inches).
- Pelham Lake. The creel limit on trout shall be two per day or in possession. All trout less than 16 inches (previously 14 inches) shall be released to the water immediately.
- Wind River Drainage streams upstream from the confluence with the East Fork of the Wind River, including the East Fork Drainage, in Fremont County. The creel limit on trout shall be three per day or in possession. No more than two shall be cutthroat trout; and, no more than one trout shall exceed 16 inches.



Kids' Fishing Days for 2008

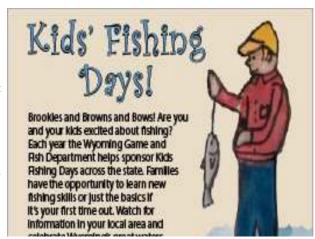
If you have kids, grandkids, or just a neighbor kid that is interested in fishing, or in whom you want to spark an interest in fishing, one of the three organized kids' fishing days within Fremont County provide the perfect opportunity. The events are designed to expose young people to the joys of fishing as an alternative to video games, televisions, and other sedentary pastimes. Help them learn a skill that will provide a lifetime of enjoyment and foster a love of the outdoors. If you need more information for any of the events, contact one of the sponsors or call us here at the Lander Regional Game

Big Bend Ponds Kids' Fishing Day: June 7, 2008

Located on the outskirts of Riverton, this event is sponsored by the Riverton Kiwanis. This event is on the "Free Fishing Day", so no licenses required regardless of age. Free lunch and lots of prizes. This event has been held for many, many years and is always a great time for the kids.

Luckey Pond Kids' Fishing Day: June 14, 2008

Just outside Lander, this event is sponsored by Popo Agie Anglers, Wyoming State Training School, U.S. Fish and Wildlife Service, and the Wyoming Game and Fish Department. Kids who are age 14 or older must have a valid fishing license. Fly-casting and fly tying clinics, free lunch, and prizes.



Scout Pond Kids' Fishing Day: June 14, 2008

Located along Horse Creek north of Dubois, the main sponsors for the 10th Anniversary of this event are Shoshone National Forest, Crowheart Conservation District, Wyoming Game and Fish Department, Dubois Anglers and Wildlife Group, Dubois Kiwanis, Dubois Lions Club, Never Sweat Recreation Board, Dubois Branch of the Bank of Jackson Hole, Wells Fargo Bank, and Riverton Wal-Mart. Kids who are age 14 or older must have a valid fishing license. Lots of educational activities, prizes, and free lunch.

Boysen Reservoir

Boysen Reservoir contains a very diverse fishery, currently including 4 native and 8 exotic resident sport fish species. Walleye has maintained a dominant role in the fishery and is the most popular species to anglers. Walleye were introduced in 1952 and have maintained their dominance through natural recruitment since 1971.

Every fall the WGFD samples Boysen Reservoir with standardized nets and methods to monitor trends in walleye abundance and size structure. Fluctuating populations are common in walleye fisheries throughout North America and are monitored through netting programs by state agencies. Netting abundance in Boysen Reservoir has fluctuated from just a few walleye per net to a high of 21 per net in 1998. After dipping in the early 2000s, walleye abundance has increased in recent years (Figure 1).

The high walleye abundance in 1998 was followed by a few years of small, skinny fish. This was a time when the forage base crashed and walleye growth slowed. Anglers were concerned with the poor condition of fish and feared that walleye mortality would increase. The condition of fish, measured by a relative weight index (Wr), has improved considerably since the late 1990s (Figure 2). Relative weight near 80 reflects fish in poor condition where as Wr near 100 reflect fish that are well fed. Average size of walleye has increased from 12.6 inches in 1998 to 16.3 inches in 2007 (Figure 1). We have also documented faster growth since 2001.

Boysen Reservoir

(Continued from page 3)

Occasionally anglers ask if WGFD has considered stocking walleye in Boysen Reservoir such as is done in waters like Ocean Lake where spawning habitat is limiting. Boysen Reservoir has an abundance of clean spawning habitat and reservoir conditions are favorable during the 10-14 days incubation time for walleye eggs. After hatching, larval walleye must travel a considerable distance to seek protection in dense cover "nursery habitat". Walleve abundance is higher in Glendo Reservoir where nursery habitat is adjacent to spawning areas. Juvenile walleye are also exposed to predation. If reservoir storage is drawn down considerably, juvenile walleye are forced from cover and exposed to predation. When yellow perch populations are high, significant predation on juvenile walleye can occur within their nursery habitat. For these reasons

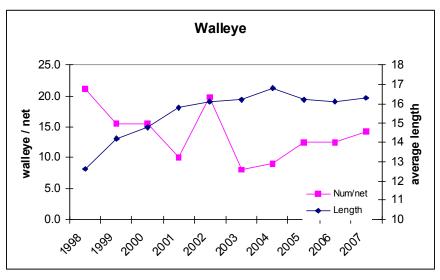


Figure 1. Number of walleye caught per net and mean length of walleye sampled from standardized sampling program at Boysen Reservoir 1998 – 2007.

stocking walleye is often ineffective. When conditions are favorable, stocking is not needed and there would be a concern for overpopulating walleye. Waters in Wyoming that are stocked with walleye still have cyclic populations, lower abundance than Boysen Reservoir, and are faced with the same factors that influence walleye fisheries dependant on natural reproduction.

Often poor walleye fishing is an indicator of the forage base. When walleye have plenty of forage they become difficult to catch, regardless of their abundance. Although walleye abundance didn't appear to change much between 2006 and 2007,

angler catch rate for walleye increased considerably from 0.15 to 0.47 walleye per angler hour. The change in angler success seems to reflect decreasing abundance of juvenile YEP. Our shore seining data showed a drastic reduction in juvenile yellow perch in 2007.

The size structure of walleye has provided anglers the opportunity to selectively harvest medium sized walleye. The average length of walleye harvested in Boysen Reservoir has been 17.7 to 17.9 inches since 2004. Less than 1% of the walleye harvested were 25 inches or larger.

Walleye fishing should be good in 2008 based on the evidence we obtained in 2007. Unless forage condition change drastically, we expect walleye fishing to remain similar to last year.

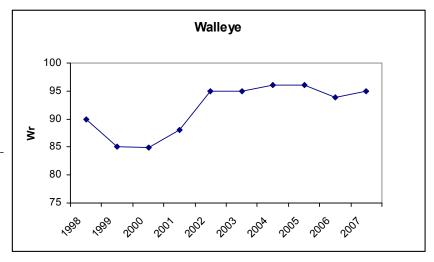


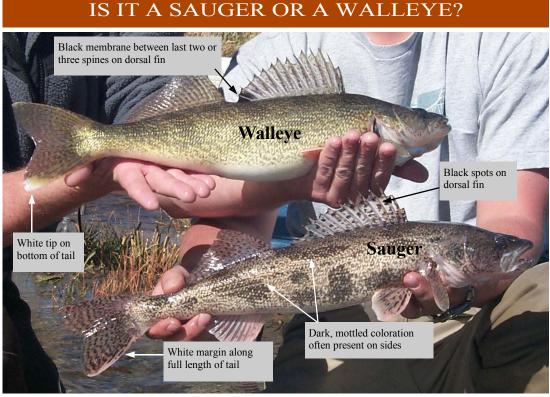
Figure 2. Mean relative weight (Wr) for 10 - 15 inch and 15 - 20 inch walleye captured with standardized sampling program in Boysen Reservoir 1998-2007.

New Fishing Regulations for Sauger and Walleye

Many may have noticed the changes in fishing regulations for walleye and sauger that were initiated in 2008. The previous regulation allowed for a creel limit of 6 walleye and sauger in combination. Due to concerns with our native populations, the limit on sauger was reduced to two fish. The limit for walleye remains at six fish per day or in possession.

Sauger are a native species in Wyoming, originally inhabiting the North Platte, Wind – Big Horn, Tongue, and Powder River systems. Walleye, on the other hand, are not native to the state and were introduced during the last century to provide additional sport fish opportunities to Wyoming anglers. Sauger are no longer found in the North Platte Drainage and there are concerns that populations remaining in other drainages may be declining. There are similar concerns in other states in the Missouri River Drainage. Changes in habitat associated with water development and dam building, competition with introduced species, and hybridization with walleye have all lead to these concerns. In the Wind River system of Wyoming we are fortunate to have one of the few remaining genetically pure sauger populations. This is due

mainly to Wyoming's history of never stocking saugeye, a walleye-sauger hybrid often artificially produced to provide another sport fish opportunity for anglers. Those states that have stocked saugeve on top of native sauger and/or walleve populations have, for the most part, regretted their decision. Whereas walleye and sauger typically don't cross-breed in the wild because of slightly different spawning seasons (walleye in April and sauger in May), saugeye have an intermediate spawning time and readily breed with both walleve and sauger. In time, the purity of both the sauger and walleye populations is compromised.



Since the new regulations went into effect in January 2008, we have been getting questions from anglers who want to know how the separate walleye and sauger limits apply to saugeye. At least at this time we do not believe that any saugeye exist in the Wind River Drainage, including Boysen Reservoir and the rivers upstream of Boysen Reservoir. We have had samples genetically tested on three separate occasions over the past ten years and no signs of hybridization were found. Additionally, biologists handle many walleye and sauger during the course of their work each year and no obvious hybrids have been seen. However, if you catch what you believe to be a saugeye and you wish to keep it, the safest course of action would be to treat it as part of your sauger limit. In addition, if it is convenient we would appreciate it if you brought it into the Lander Regional Office or contacted us. We would be interested in verifying any hybridization between sauger and walleye in the Wind River Drainage.



Living in Harmony with Fish



The ideal piece of property for many people involves enough acreage to have some privacy, a good view of the mountains, irrigated pastures for raising a few horses, and if your really lucky—a nice trout stream teaming with fish. If you are fortunate enough to have such a piece of heaven, you might want to consider the fact that many of the things you do on your property will effect the natural systems that are in place on that piece of ground. Since many of those systems—healthy streams, beautiful native vegetation, diverse wildlife populations—are the reason you fell in love with the property in the first place, it is to your advantage to care of them. Just as your house needs a new coat of paint periodically, and your horses need proper feed and veterinary care, you need to be mindful of things you should or shouldn't do to your land to keep it in good condition.

Stream channels and riparian systems are some of the most valuable habitats for fish and wildlife, yet constitute a small percentage of the total landscape. There are many things that you can do as a landowner to keep these systems healthy and functioning properly. Many of our foothill and lowland streams run through soils that are easily eroded. Erosion is a natural process and can be an important component of a healthy stream system. Materials that are eroded from the channel in one location are moved downstream and deposited to form point bars and new stream banks in other areas. It is this process of channel movement that over hundreds and thousands of years creates the wide fertile valleys that are so important to us. Also, this process is essential for providing spawning gravels for fish, creating undercut banks, and incorporating trees into the channel to create cover habitat. However, if stream banks and adjoining lands become unstable and erosion begins happening at a rate beyond the capacity of the stream to incorporate it into point bars and other channel features, the results can be devastating. Once clean, rocky stream beds can become covered with sediment and no longer suitable for aquatic insects or fish spawning. The stream channel can become wider and shallower, resulting in increased water temperatures and less suitable habitat for fish. During high spring runoff and high flow events the channel may migrate considerable distances, destroying once productive pastureland or endangering homes and other structures. What can you as a landowner do to prevent excessive erosion? Probably the most important component of a healthy stream system is healthy streamside or riparian vegetation. Riparian vegetation is usually comprised of many different plants, including deep-rooted grasses, sedges, rushes, willows, water birch, chokecherry, aspen, and cottonwoods. The combination of these plants and their diverse root systems tend to be very resistant to the erosional forces of running water. They also help shade the stream and keep water temperatures cooler. Vegetation overhanging the channel provides hiding cover for trout and is the source of terrestrial insects falling into the stream for fish to feed upon. In many of our streams it is the autumn leaves that fall into the stream that provide the basis for the aquatic food chain. So as a landowner, maintaining healthy riparian habitat may be the most important thing you can do to keep your stream and it's fish population in good condition. Avoid grazing too near the stream. Restrict livestock to small water gaps, or even better, provide a source of off-channel water. Leave a buffer between your cultivated fields and the stream. Avoid use of pesticides and herbicides that can enter the stream or damage riparian habitat. If you need to treat noxious weeds (Russian olives, salt cedar, leafy spurge, etc.) be careful to avoid killing desirable vegetation. Your best defense against noxious weed invasion is to have healthy, undisturbed native vegetation.

Another common activity that results in harm to fisheries is the direct alteration of stream channels, usually by road crossings or installation or maintenance of irrigation diversions. Improper placement or sizing of culverts or bridges can cause the stability of a channel to unravel. The effects can be far-reaching, not only downstream of the structure but upstream as well. Diversions should be built and maintained with consideration for channel stability, riparian vegetation, and fish populations. Try to avoid creating barriers to fish movement and if possible use designs that will limit the number of fish that diverted into irrigation ditches.

If you have concerns or need help with designing road crossings, irrigation structures, fencing, off-site water sources, or spray projects, visit your local Conservation District, NRCS, or us here at the Game and Fish Department. Remember, it is your land and it is you that ultimately determines how it will look and function. Enjoy it and try to share it with the native fish, wildlife, and plants that depend upon it.

Whirling Disease and Aquatic Invaders

Enjoying the great outdoors is important to many of us. Fishing, boating and wildlife watching are traditions that we want to preserve for our children and their children. Today these traditions are at risk. Diseases and aquatic invaders threaten our valuable waters, and you can help reduce the threat.

One of the most detrimental diseases to trout fisheries is whirling disease. Whirling disease is caused by a microscopic parasite and is responsible for causing major trout declines throughout the Rocky Mountain region. This disease and other diseases and parasites can have long-term impacts to our fisheries.

Aquatic invaders also widely impact our fisheries by displacing native species or reducing habitat quality. Aquatic invaders include zebra mussels, Eurasian water milfoil, New Zealand mudsnail and unwelcome fish species. These and other non-native or exotic plants and animals do not naturally occur in our waters and cause ecological or economic harm.

Disease-causing parasites and aquatic invaders get into lakes and rivers by "hitching" rides with anglers, boaters and other outdoor recreationists. If you leave a body of water without taking precautions you may be transporting harmful species from one water to another. To help prevent the spread of these threats, when you leave a body of water:

- ♦ Clean all equipment (boats, trailers, waders, boots and float tubes) of mud, plants, fish and animals <u>before</u> leaving the river or lake.
- Clean and dry anything that comes into contact with water (waders, equipment, clothing, dogs, etc.)
- ♦ Do not transport any river or lake water in coolers, buckets, boats or live wells from one river basin to another. Drain water from equipment (boat, motor, trailer) <u>before</u> transporting.
- Don't dispose of fish heads, skeletons, or entrails in any water body.

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- ♦ Disinfect equipment at home with a solution of ¾ cup chlorine bleach per gallon of water to kill disease-causing parasites.
- Never release fish, plants or animals into a body of water unless they came out of that body of water.

Introduced fish species pose a significant threat to our fisheries. A number of Wyoming fisheries have been impacted by illegal introductions. To avoid these impacts, remember that it is unlawful to:

- ♦ Plant live fish or fish eggs without the consent and supervision of the Wyoming Game and Fish Department.
- ◆ Transport live fish or live fish eggs from the water of capture. This includes transporting live fish in the live well of your fishing boat once you are off the water.
- Release aquarium fish or unused baitfish in any Wyoming water.



Wyoming Game & Fish Department Conserving Wildlife—Serving People

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WE'RE ON THE WEB

http://gf.state.wy.us/

During 2007, the Game and Fish Department implemented a new Stop Poaching tip line designed to help crack down on illegal hunting and fishing activities in the state. The new number, (877) WGFD-TIP will handle wildlife violation tips in a more efficient manner. We wanted a new number that was easy to remember so hunters and anglers out in



the field could report violations immediately.

Illegal transplanting or stocking of fish has been particularly devastating to important fisheries in recent years. We need your help watching for these violations and reporting them as soon as possible.

Citizens should be alert and gather as much specific information about the violation as possible. Try to document the date, time, location and specific nature of the violation. Include a physical description of the suspected violator or include contact information if possible, as well as a license plate number and description of any vehicles involved in the incident.

Fishing in Bear, Wolf, and Lion Country

Upper Wind River Country is bear, wolf, and lion country. Anglers in this area need to know about these predators and how to handle confrontations with them. Below are some tips, but anglers are strongly encouraged to seek more detailed information.

- ♦ Always carry bear spray where it is easily accessible and know how to use it.
- ♦ Watch for sign, such as tracks, scat, digging, disturbed rocks and logs, etc.
- ◆ Avoid fishing alone groups of people tend to make more noise, appear more formidable, and can help each other.
- ♦ It may be difficult for a bear to hear you near running water. Make noise by talking, singing, etc. to make predators aware of your presence. Bells alone are often too quiet.
- Be especially careful where you can't see the path ahead or are walking near thick cover. If possible, avoid these areas.
- ♦ Avoid carcasses a bear may be nearby.
- ♦ Keep a clean camp and store all attractants in bear-resistant containers or otherwise unavailable to animals.
- Store fish and bait as you would other attractants.
- ♦ Either wait until you are home to clean fish or store entrails in an airtight container until you can properly dispose of them.
- ♦ If you encounter a bear, remain calm. Increase the distance between you and the bear, taking equipment and fish so the bear does not associate fishing with food. Never run. Prepare to use your bear spray and back away slowly. If you have a fish on the line, give the fish slack or cut the line.

